experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
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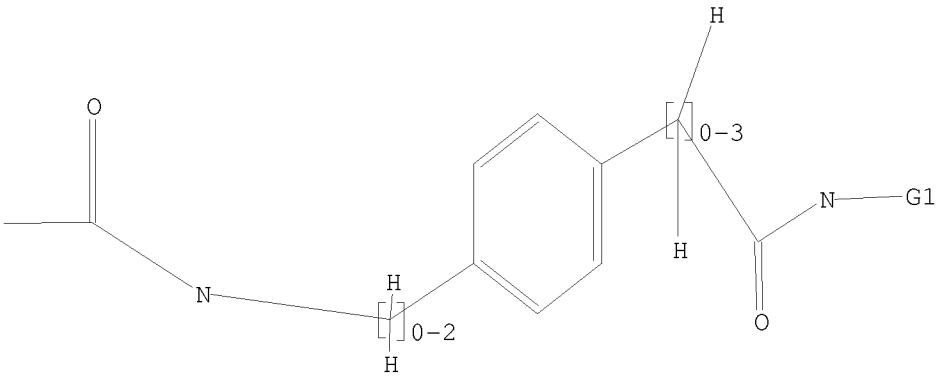
L4 STRUCTURE UPLOADED

=> d
L4 HAS NO ANSWERS
L4 STR



G1 Ph,OH

Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SCREEN SEARCH COMPLETED - 138757 TO ITERATE

1.4% PROCESSED 2000 ITERATIONS 2 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

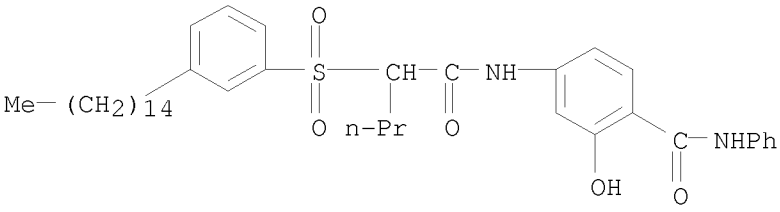
FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2753060 TO 2797220
PROJECTED ANSWERS: 2069 TO 3481

L5 2 SEA SSS SAM L4

=> d 1-2
THE ESTIMATED COST FOR THIS REQUEST IS 4.20 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L5 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2010 ACS on STN
RN 197566-37-3 REGISTRY

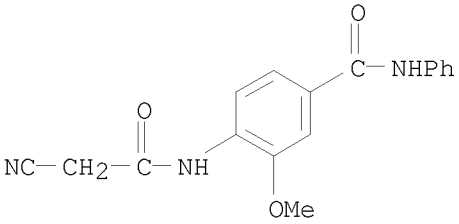
ED Entered STN: 20 Nov 1997
CN Benzamide, 2-hydroxy-4-[[1-oxo-2-[(3-pentadecylphenyl)sulfonyl]pentyl]amino]-N-phenyl- (CA INDEX NAME)
MF C39 H54 N2 O5 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L5 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2010 ACS on STN
RN 73207-88-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Benzamide, 4-[(2-cyanoacetyl)amino]-3-methoxy-N-phenyl- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzamide, 4-[(cyanoacetyl)amino]-3-methoxy-N-phenyl- (9CI)
OTHER NAMES:
CN 3-(Cyanoacetamido)-4-methoxybenzanilide
MF C17 H15 N3 O3
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s l4 sss full
THE ESTIMATED SEARCH COST FOR FILE 'REGISTRY' IS 191.05 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N or END:y
FULL SEARCH INITIATED 16:13:37 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 2767426 TO ITERATE

72.3% PROCESSED 2000000 ITERATIONS 557 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.11

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 2767426 TO 2767426
PROJECTED ANSWERS: 687 TO 853

L6 557 SEA SSS FUL L4

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	197.21	537.69

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-20.40

FILE 'CAPLUS' ENTERED AT 16:13:58 ON 24 APR 2010
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 24 Apr 2010 VOL 152 ISS 18
FILE LAST UPDATED: 23 Apr 2010 (20100423/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2010
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2010

CAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l6 and py<2003
52 L6
22998751 PY<2003

L7 5 L6 AND PY<2003

=> s l6 and py<2004
52 L6
24050824 PY<2004
L8 6 L6 AND PY<2004

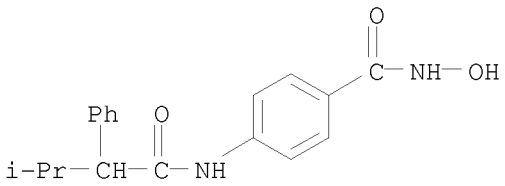
=> d 1-6 ibib abs hitstr
THE ESTIMATED COST FOR THIS REQUEST IS 34.86 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L8 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2007:705011 CAPLUS
DOCUMENT NUMBER: 147:125824
TITLE: Controlled release solid oral dosage form containing a histone deacetylase inhibitor and a medium chain fatty acid derivative as an absorption enhancer
INVENTOR(S): Cumming, Kenneth I.; Ramtoola, Zebunnissa; Leonard, Thomas Waymond
PATENT ASSIGNEE(S): Merrion Research I Limited, Ire.
SOURCE: U.S. Pat. Appl. Publ., 35pp., Cont.-in-part of U.S. Ser. No. 510,560.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

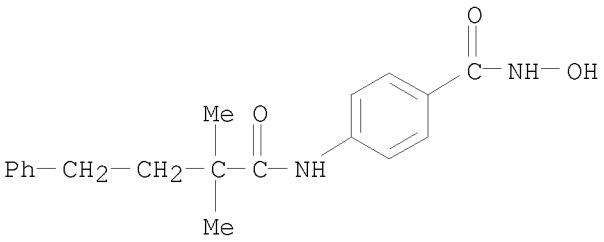
PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
US 20070148228	A1	20070628	US 2006-450641		20060609	
US 20030091623	A1	20030515	US 2000-510560		20000222	<--
US 7658938	B2	20100209				
US 20080275001	A1	20081106	US 2008-172707		20080714	
US 20100028421	A1	20100204	US 2009-553196		20090903	
PRIORITY APPLN. INFO.:			US 1999-121048P	P	19990222	
			US 2000-510560	A2	20000222	

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
AB The invention relates to a pharmaceutical composition and oral dosage forms comprising an histone deacetylase (HDAC) inhibitor in combination with an enhancer to promote absorption of the HDAC inhibitor at the gastrointestinal tract cell lining. The enhancer is a medium chain fatty acid or a medium chain fatty acid derivative having a carbon chain length of from 6 to 20 carbon atoms. Preferably, the solid oral dosage form is a controlled release dosage form such as a delayed release dosage form. Thus, granules comprising 61.05% parnaparin sodium, 33.95% sodium caprate and 5% polyvinylpyrrolidone were prepared and administered orally to humans. The mean delivery of parnaparin, as measured by plasma anti-factor Xa levels, was considerably higher from the solid dosage form than that from the corresponding solution dosage.
IT 854779-93-4 854779-95-6
RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled release solid oral dosage form comprising a histone deacetylase inhibitor and a medium chain fatty acid derivative as an absorption enhancer)

RN 854779-93-4 CAPLUS
CN Benzeneacetamide, N-[4-[(hydroxyamino)carbonyl]phenyl]-α-(1-methylethyl)- (CA INDEX NAME)



RN 854779-95-6 CAPLUS
CN Benzenebutanamide, N-[4-[(hydroxyamino)carbonyl]phenyl]-α,α-dimethyl- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L8 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1954:71642 CAPLUS
DOCUMENT NUMBER: 48:71642
ORIGINAL REFERENCE NO.: 48:12702h-i,12703a-h
TITLE: Antituberculotics. I. Preparation of aryl p-amino-salicylates
AUTHOR(S): Maruyama, Sutekichi; Imamura, Hisashi
CORPORATE SOURCE: Takeda Pharm. Inds., Ltd., Osaka
SOURCE: Journal of the American Chemical Society (1952), 74, 2589-93
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 48:71642
AB p-Nitrosalicylic acid (I) (50 g.), 30.8 g. PhOH, and 150 mL. PhNO2 were treated at 110° by the gradual addition of 18.4 g. POCl3, heating was continued first at 110° then at 130-40° for 2 h. until the evolution of HCl ceased to yield 39.3 g. (56%) Ph p-nitrosalicylate (II), m. 146-8°. Working up the mother liquor gave a total yield of 78.5% II. The β-naphthyl ester (III), m. 188-90°, was obtained in 83% yield by the same method. I (1.83 g.) and 1.39 g. p-cresol were treated at 100° with 0.8 g. POCl3, the heating continued for 1 h. at 110°, then 1 h. at 130-40°, and finally for 30 min. at 140-50°. The resulting solid was washed with cold 0.1N NaOAc and H2O and recrystd. to yield 1.2 g. (73.2%) p-tolyl

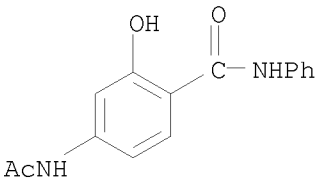
p-nitrosalicylate (IV), m. 120-2°. In a similar manner the following esters of I were obtained (% yield and m.p. given): p-chloro-m-tolyl (V), 80, 120-1°; thymyl (VI), 76, 60-1°; guaiacyl (VII), 70, 105-6°; p-nitrophenyl, -, 151-2°. II (12 g.) was added during 10 min. to 33 g. $SnCl_2$ in 36.6 g. of 37% HCl and 40 mL. HOAc and refluxed 10 min. to yield 8.4 g. (79.5%) Ph p-aminosalicylate (VIII), m. 144-6°. The following p-aminosalicylates were similarly prepared (compound prepared from, % yield, and m.p. given): IV, 80, 121-2°; V, 80, 133°; VI, 86, 136-7.5°; VII, 89, 139-40°; III, 83, 160°. The presence of the NH_2 group in VIII may be proved by diazotizing, coupling in alkali with β-naphthol, to yield a red colored material. II (5 g.) in HOAc and 210 mL. concentrated HCl was treated during 10 min. with 6 g. Zn powder at 50-60° and the mixture heated for 10 min. longer to yield 3.1 g. (70%) VIII. II when refluxed 4 h. with Fe powder, concentrated HCl, and EtOH was not reduced, but transesterification gave Et p-nitrosalicylate, m. 84-5°. Na p-aminosalicylate (10.55 g.) and 5.3 g. anhydrous Na_2CO_3 were treated with Ac_2O to give 9.3 g. (95.5%) p-acetamidosalicylic acid (IX), m. 224-5° (decomposition). IX (9.76 g.) was heated for 30 min. with 15 g. Ac_2O and 2 drops concentrated H_2SO_4 to yield 9.5 g. N,O-diacetyl-p-aminosalicylic acid (X), colorless crystals, m. 181-2°. X gives a neg. color test with $FeCl_3$. X was prepared directly from p-aminosalicylic acid (XI) by refluxing 1.5 h. with fused NaOAc and Ac_2O in a 52.2% yield. XI when treated with Ac_2O and a few drops of concentrated H_2SO_4 on a H_2O bath for 1.5 h. also gave X. X (10 g.) was heated below 35° with 40 g. $SOCl_2$ until solution was effected, heated 5-10 min. longer, excess $SOCl_2$ distilled in vacuo (below 30°), and the crude residue kneaded twice with petr. ether-C_6H_6 and then twice with dry pert. ether to yield material which assayed 83% pure N,O-diacetyl-p-aminosalicyl chloride (XII), m. 130° (decomposition). XII (0.2 g.) was dissolved in 2 mL. Me_2CO and treated with aniline in Me_2CO at room temperature for 5 min., the Me_2CO removed, the residue washed free of aniline with dilute HCl and then H_2O. The solids were extracted with 1% NaOH and treated with CO_2 to yield crude p-acetaminosalicylanilide, which upon crystallization m. 252-3°. The alkali-insol. residue was recrystd. from dilute MeOH to give N,O-diacetyl-p-aminosalicylanilide, m. 190-1°. Crude XII (from 4 g. X) was refluxed with 1.6 g. PhOH and 4 mL. C_6H_6 until evolution of HCl had almost ceased, heated 10 min. longer, the PhOH and solvent removed by distillation in vacuo followed by steam distillation, the residue taken up in EtOH, the solids filtered off, the solution concentrated to dryness, the residue taken up in Et_2O, the Et_2O washed with 5% $NaHCO_3$ and H_2O, then with 0.5N NaOH and finally with H_2O to yield Ph N,O-diacetyl-p-aminosalicylate (XIII), rosette aggregates of white needles, m. 147°. Saturation of the 0.5N NaOH exts. with CO_2 gave Ph p-acetaminosalicylate (XIV), m. 178-9°. XIV gives a reddish violet color with $FeCl_3$ whereas XIII gives no color reaction. XIII (0.05 g.) in 1 mL. Me_2CO was let stand with 0.32 mL. N NH_4OH for 24 h. at room temperature, and 0.16 mL. 2N HCl added; the precipitate which formed was collected, taken up in 0.25N NaOH, and treated with CO_2 to give XIV. XIII (0.03 g.) in 0.3 g.

HOAc was refluxed 5 min. with 0.3 mL. 4N HCl, the mixture cooled, 5 mL. H2O and 1.2 mL. N NaOH added, the precipitate collected, washed with H2O, 2% Na2CO3, and H2O, and the crude product purified by dissolving in ice-cold 0.2N NaOH and adding CO2 to yield VIII.

IT 857756-56-0P, Salicylanilide, 4-acetamido-
RL: PREP (Preparation)
(preparation of)

RN 857756-56-0 CAPLUS

CN Benzamide, 4-(acetylamino)-2-hydroxy-N-phenyl- (CA INDEX NAME)



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L8 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1946:3508 CAPLUS

DOCUMENT NUMBER: 40:3508

ORIGINAL REFERENCE NO.: 40:560f-i

TITLE: p-Aminobenzanilide and derivatives

AUTHOR(S): Ju-Hwa Chu, Edith

CORPORATE SOURCE: Univ. of Texas

SOURCE: Journal of the American Chemical Society (1945), 67, 1862-3
CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE: Journal

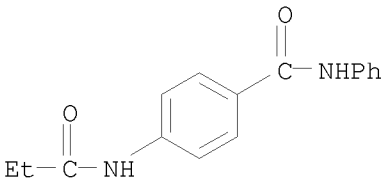
LANGUAGE: Unavailable

AB Reduction of p-O2NC6H4CONHPh with SnCl2 in HCl gives 90% of p-H2NC6H4CONHPh (I); other reducing agents were not satisfactory. The following N4-acyl and aroyl derivs. were prepared from I and the chloride in C6H6 or PhMe (heating on the steam bath for 0.5 to 1 h.): Ac (II), m. 211.5°, 65%; propionyl (III), m. 230° (decomposition), 100%; butyryl (IV), m. 231°, 86%; isobutyryl (V), m. 285° (decomposition), 97%; valeryl (VI), m. 227°, 78%; Bz, m. 323-4° (decomposition), 98%; p-nitrobenzoyl, m. 298° (decomposition), 100%; phenylsulfonyl, m. 210.5° (decomposition), 100%; p-bromophenylsulfonyl, m. 240-1°, 74%; 2-naphthylsulfonyl, m. 230°, 95%; p-acetamidobenzoyl, p-(p-AcNHC6H4CONH)C6H4CONHPh, m. 245-6° (decomposition). Tests on Lactobacillus arabinosus 17-5 showed that II-VI are toxic at a concentration of 500 γ per 10 mL. of medium and the toxic action is not reversed by addition of p-H2NC6H4CO2H (VII). However, I possesses slight growth-promoting action similar to that of VII.

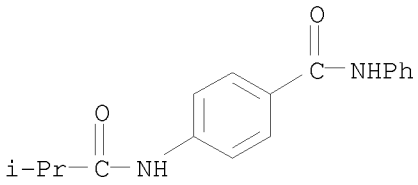
IT 827620-97-3P, Benzanilide, 4-propionylamino-
860521-24-0P, Benzanilide, 4-isobutyrylamino-
RL: PREP (Preparation)
(preparation of)

RN 827620-97-3 CAPLUS

CN Benzamide, 4-[(1-oxopropyl)amino]-N-phenyl- (CA INDEX NAME)



RN 860521-24-0 CAPLUS
CN Benzamide, 4-[(2-methyl-1-oxopropyl)amino]-N-phenyl- (CA INDEX NAME)



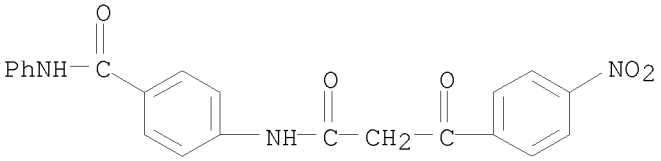
L8 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1935:63695 CAPLUS
DOCUMENT NUMBER: 29:63695
ORIGINAL REFERENCE NO.: 29:8357b-d
TITLE: Dyes and intermediates
PATENT ASSIGNEE(S): Soc. pour l'ind. chim. a Bale
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 783304		19350711	FR	19341226 <--

AB Arylides of aroyl acetic acids are prepared by condensing negatively substituted aroyl halides, particularly nitroaroyl halides, with acetoacetic ester, then treating the aroyl acetic esters thus obtained with saponifying agents and condensing with aromatic amines. The products have good affinity for cotton. The Ba or other insol. salts may be used as pigments or dyes for varnishes. Thus, p-nitrobenzoyl-acetic ester is heated with p-aminobenzoylaniline in xylene. The product has the formula p-NO2C6H4CO-CH2CONHC6H4CONHPb-P.

IT 860555-61-9P, Acetanilide, α-p-nitrobenzoyl-p-phenylcarbamyl-
RL: PREP (Preparation)
(preparation of)

RN 860555-61-9 CAPLUS
CN Benzenepropanamide, 4-nitro-β-oxo-N-[4-[(phenylamino)carbonyl]phenyl]- (CA INDEX NAME)



L8 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1930:764 CAPLUS
DOCUMENT NUMBER: 24:764
ORIGINAL REFERENCE NO.: 24:118b-f
TITLE: Ring openings with benz-α,β-isooxazoles. II
AUTHOR(S): Lindemann, Hans; Cissee, Hans
SOURCE: Journal fuer Praktische Chemie (Leipzig) (1929), 122, 232-60
CODEN: JPCEAO; ISSN: 0021-8383
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

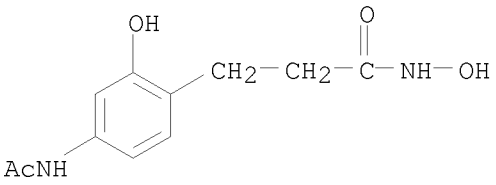
AB cf. C. A. 23, 2973. Me 6-nitroindoxazene-3-carboxylate is reduced by SnCl2 and HCl to the 6-NH2 derivative, yellow, m. 206° (Ac derivative, m. 210°; di-Ac derivative, m. 130°), which by hydrolysis with H2SO4 gives 6-aminoindoxazene-3-carboxylic acid (I), decomps. 160° with the formation of 4,2-H2N(HO)C6H3CN, m. 182° (Ac derivative, decomps. 260-80°). The Et ester of I, m. 147° (Ac derivative, m. 186-7°), with N2H4.H2O gives the hydrazide, yellow, m. 218°, of 6-acetamidoindoxazene-3-carboxylic acid, transformed by HNO2 into the corresponding aside, m. 155° (decomposition); boiling the latter with the appropriate alc. gives the Pr, Bu and iso-Am esters of 6-acetamidoindoxazene-3-carbamic acid, m. 205, 248 and 215° (decomposition), resp. Boiling the azide with dilute AcOH gives 3-amino-6-acetamidoindoxazene, m. 222° (di-Ac derivative, m. 256°; this by warming with 2 N NaOH passes into 3-o-hydroxy-p-acetamidophenyl-5-methyl-1,2,4,-oxdiazole, m. 210°, also obtained by reducing with SnCl2 and HCl the analogous nitrooxdiazole), and either from the hydrolysis of this compound with dilute H2SO4, or by reduction of 6-nirto-3-aminoindoxazine with SnCl2 3,6-diamidoindoxazene, m. 141°, was obtained. 3-Amino-6-acetamidoindoxazene and HNO2 give the 3-HO derivative, m. 160-5° (decomposition); heating with HCO2H gives 2-hydroxy-4-acetamidobenzohydroxamic acid, m. 218°. The last 2 compds., warmed with EtCO2H or (EtCO)2O, resp., give 2-hydroxy-4-acetamidobenzopropionylhydroxamic acid, m. 194°, which gives with 2 N NaOH 6-acetamido-2-benzoxazolone, m. 320°. Me 6-chloroindoxazene-3-carboxylate, m. 124°, from the NH2 derivative through the Sandmeyer reaction, with 2 N NaOH gives, on long standing, the free acid, decomps. 171°, with remelting above 300°. Either the acid or ester, boiled with 2 N NaOH, gives 4-chloro-2-hydroxybenzonitrile, m. 155° and forming at 180-200° a cyaphenin derivative The above ester with N2H4 in EtOH gives the hydrazide of 6-chloroindoxazene-3-carboxylic acid, decomps. 192°; HNO2 transforms this into the corresponding aside, m. 142° (decomposition), which in turn is converted by warning with AcOH into bis-[6-chloro-3-indoxazenyl]urea, m. 260°, while boiling Ac2O gives 6-chloro-3-acetamidoindoxazene, m. 186° (the free amine m.

135°), transformed by warming with 2 N NaOH into 3-o-hydroxy-p-chlorophenyl-5-methyl-1,2,4-oxdiazole, m. 79°. Me indoxazene-3-carboxylate, m. 69°; free acid, m. 140-1°; hydrazide, m. 143°; azide, m. 95°; sym-bis-3-indoxazenylurea, m. 244°; 3-aminoindoxazene, m. 110° (Ac derivative, m. 155-6°).

IT 1195576-23-8P
RL: SPN (Synthetic preparation); PRP (Properties); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(Ring openings with benz-α,β-isooxazoles. II)

RN 1195576-23-8 CAPLUS

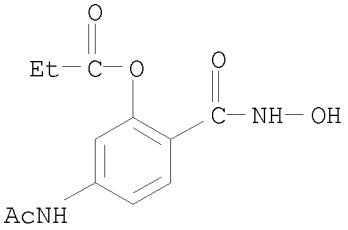
CN Benzenepropanamide, 4-(acetylamino)-N,2-dihydroxy- (CA INDEX NAME)



IT 856074-31-2P, Salicylohydroxamic acid, 4-acetamido-, propionate
RL: PREP (Preparation)
(preparation of)

RN 856074-31-2 CAPLUS

CN Benzamide, 4-(acetylamino)-N-hydroxy-2-(1-oxopropoxy)- (CA INDEX NAME)



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L8 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1908:4842 CAPLUS

DOCUMENT NUMBER: 2:4842

ORIGINAL REFERENCE NO.: 2:1134g-i,1135a-e

TITLE: The Action of Hydrazine Hydrate on Nitro Compounds. (III.) The Action of Hydrazine Hydrate on 2,4-Dinitrobenzoic Acid

AUTHOR(S): Curtius, Theodore; Bollenbach, Hermann Fr.

CORPORATE SOURCE: Chem. Inst.;Univ. Heidelberg

SOURCE: Journal fuer Praktische Chemie (Leipzig) (1908), 76, 281-301
CODEN: JPCEAO; ISSN: 0021-8383

DOCUMENT TYPE: Journal

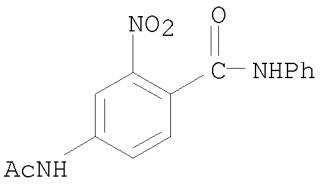
LANGUAGE: Unavailable

AB 2,4-Dinitrobenzoic add was prepared by nitrating p-nitrobenzoic acid (Ann., 222; 79) and by oxidizing 2,4-dinitrotoluene with HNO3 or the CrO3-H2SO4 mixture. Its ethyl ester, white silky needles, m. 41°. Heated with hydrazine hydrate, the add yielded 2-nitro-4-aminobenzoic acid, brick-red needles, difficultly soluble in cold H2O and EtOH, m. 255°. Silver salt, gray-green scales. Sodium salt, red-brown, somewhat soluble in EtOH. Heated with alcoholic hydrazine hydrate, 2,4-dinitrobenzoic ester yielded 2-nitro-4-aminobenzoic ester, yellow needles, m. 130°. Heated with dilute hydrazine hydrate, this ester formed 2-nitro-4-aminobenzhydrazide, (NO2)(NH2)C6H3CONHNH2, golden yellow leaflets or red-yellow prisms, easily soluble in EtOH, alkalies, dilute mineral acids and hydrazine hydrate, insoluble in C6H6, CHCl3, and ligroin, reduces Fehling's solution and ammoniacal AgNO3, m. 212°. With benzaldehyde, this hydrazide forms benzal-2-nitro-4-aminobenzoylhydrazine, (NO2)NH2C6H5.CONHN:CHC6H5, yellow crystals, easily soluble in EtOH and AcOH, insoluble in H2O, CHCl3, C6H6 and Et2O, m. 187-9°. With salicylaldehyde, o-hydroxybenzal-2-nitro-4-aminobenzoylhydrazine, beautiful glistening crystals, m. 210°. With acetone, acetone-2-nitro-4-aminobenzoylhydrazine, gold-yellow crystals, m. 204-6°. With benzoyl chloride dibenzoyl-2-nitro-4-aminobenzoylhydrazine, (C6H5CO)NH(NO2) C6H3CONHNH(C6H5CO), m. 239-41°. With acetic anhydride, triacetyl-2-nitro-4-aminobenzoylhydrazine, leaflets, soluble in H2O, EtOH and AcOH, m. 255°. Treated with alcoholic hydrazine hydrate instead of simple hydrazine hydrate, dinitrobenzoic ester yielded di-2-nitro-4-aminobenzoylhydrazine, [(NO2)(NH2)C6H3CONH]2, yellow-brown crystals, m. 238°; with alcoholic HCl at 110°, yielded 2-nitro-4-aminobenzoic acid. An aqueous solution of 2-nitro-4-aminobenzhydrazine, with NaNO2 and acetic acid yielded 2-nitro-4-aminobenzazide, NO2(NH2)C6H3CON3, red crystals, insoluble in H2O, EtOH and Et2O, saponified by dilute NaOH or H2SO4, yielding HN3 and 2-nitro-4-aminobenzoic acid. Boiling the azide with absolute EtOH yielded nitrogen and 2-nitro-4-aminophenylurethane. Boiling the azide for 8 hrs. with an excess of aniline yielded 2-nitro-4-aminobenzanilide, glistening white needles, difficultly soluble in H2O, EtOH and Et2O, easily soluble in aniline, m. 226°. This anilide with acetic acid yielded, acetyl-2-nitro-4-aminobenzanilide, CH3CONH(NO2)C6H3CO.NHPh, dark yellow needles, insoluble in H2O, EtOH and Et2O, m. 238°. Boiling the azide with water, yielded 2-nitro-4-phenylenediamine and sym. di-2-nitro-4-aminophenylurea, [NO2(NH2)C6H6NH]2CO, insoluble in EtOH, H2O, Et2O and AcOH, decomposed by concentrate NaOH, yielding 2-nitro-4-phenylenediamine. Other hydrazine hydrate reductions were studied: nitrobenzene, o-nitrophenol, p-nitrophenol and m-dinitrobenzene yielded the respective amines; p-nitrosodimethylaniline yielded tetramethyldiaminoazoxybenzene. Hydrazine hydrate had no effect on m- and p-nitrobenzoic acids even at 125°.

IT 861606-80-6P, Benzanilide, 4-acetamido-2-nitro-
RL: PREP (Preparation)
(preparation of)

RN 861606-80-6 CAPLUS

CN Benzamide, 4-(acetylamino)-2-nitro-N-phenyl- (CA INDEX NAME)


NO2
O
C
NHPh
AcNH